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MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196				
EXAMINER				
BARQADLE, YASIN M				
ART UNIT		PAPER NUMBER		
2153				
NOTIFICATION DATE		DELIVERY MODE		
09/05/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.Schaumburg@motorola.com
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Office Action Summary

Application No.

10/600,074

Applicant(s)

CHIN, KWAN WU

Examiner

YASIN M. BARQADLE

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

Applicant's arguments filed on May 29 2008 have been considered and are deemed persuasive. However, they are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3-5, 8-13 and 15-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Hies et al USPN. (7,333,510) in view of Kostic et al US Publication (20040111494), hereinafter "Kostic".

As per claims 1,9 and 17 Hies teaches a system supporting first and second protocols, said system (abstract) comprising:

a transmission link supporting first and second protocols (fig. 2) ;

a plurality of host computing devices coupled to said transmission link, each of said host computing devices operating in accordance with at least one of said first and second protocols (fig. 2, 210,212, 230,232 and col. 3,lines 61-65); and a dual-stack host coupled to said transmission link and operable in accordance with each of said first and second protocols, said dual-stack host monitoring said transmission link for requests, detecting a first request from a source host computing device to a destination host computing device using said first protocol, sending a second request to said destination computing device using each of said first and second protocols (fig. 2, 206 and col. 4,lines 4-27), and invoking protocol translation(see fig. 7 and 8 step 804), when a reply from said destination host computing device is received using said second protocol and no reply is received from said destination host computing device using said first protocol (col. 3,lines 5-29 and col. 4, lines 9-29; and a proxy mechanism coupled to said transmission link, said proxy mechanism generating a proxy address for said destination host computing device using said first protocol to facilitate communication between said source host computing device and said destination host computing device (fig. 2, 206 and col. 4,lines 4-27 and col. 4, lines 9-29);

Hies further teaches a network interface for communicating with said network; a memory for storing information; a processor coupled to said memory and said network interface (see fig. 2 and fig. 6).

Although Hies shows substantial features of the claimed invention, he does not explicitly multicast addressing in a dual-stack network.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the system disclosed by Hies, as evidenced by Kostic.

In analogous art, Kostic disclose "Network location signature for disambiguating multicast message in dual-IP stack and/or multi-homed network environments" see Title. Kostic further teaches "Accordingly, when a dual stack/multi-homed node sends device announcements with its active addresses onto different protocol stacks or network segment, the multicast device announcements include the same network location signature. Other devices (e.g., controllers or control points) can then distinguish that the address in the multicast message is an additional active address, and the device's network configuration has not changed. Upon the device's active addresses changing, the device includes a new network location signature associated with the changed set of addresses in its multicast messages." Other devices can then distinguish based on the changed network location signature in the device's multicast messages that the device's network configuration has changed."(¶ 0013)

Giving the teaching of Kostic, a person of ordinary skill in the art would have readily recognized the desirability and the advantage of modifying Hies by employing the dual-stack multicast system of Kostic due the flexibility provided by the system of Kostic that permits multiple protocol stacks to support communication via multiple networking protocols such as IPv4 networking protocol stack and an IPv6 networking protocol stack. It can also can include single stack devices that support a single networking protocol, as well as devices that include multiple stacks for any variety or combination of networking protocol, including non-Internet protocols (§ 0027).

As per claims 3, 10 and 18, Hies the invention wherein said first and second protocols are each selected from the group of protocols consisting of Internet Protocol version 4 (IPv4) and Internet Protocol version 6 (IPv6) (see fig. 2).

As per claims 4 and 11, Hies the invention wherein said protocol translation comprises the steps of: generating a proxy address using said first protocol for said destination host; and forwarding said proxy address to said source host (col. 4, lines 9-29).

As per claims 5 and 12, Hies the invention wherein said protocol translation comprises the further steps of: creating an alias on a network interface at a

translation mechanism in the multicast network; and assigning said proxy address to said aliased network interface to enable said translation mechanism to detect and process packets addressed to said proxy address (col. 4, lines 9-61).

As per claims 8, 16 and 20, Kostic teaches the invention wherein said multicast network is a multicast domain name system network (§ 0066-0070)).

As per claim 13, Hies teaches the method according to claim 6, wherein said translation mechanism is selected from the group of translation mechanisms consisting of a translator and a proxy (col. 4, lines 9-61).

As per claims 15, Kostic teaches, wherein said dual-stack host, said proxy mechanism and said translation mechanism are co-located in a node of said multicast network (fig. 1).

As per claims 19, Hies teaches multicast system according to claim 17, wherein said dual-stack host and said proxy mechanism are co-located (see fig. 2, 206).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hies et al USPN. 7,333,510 and Kostick in view of Ananda et al USPN (7231452).

As per claim 2 although Hies and Kostic show substantial features of the claimed invention, they do not explicitly show using unicast reply or request between the destination host and the source host. Nonetheless, this feature is well known in the art and would have been an obvious modification of the system disclosed by Hies and Kostic, as evidenced by Ananda USPN. (7231452).

In analogous art, Ananda disclose using unicast reply or request between the destination host and the source host in a dual-stack environment (col. 9, lines 43-58)

Giving the teaching of Ananda, a person of ordinary skill in the art would have readily recognized the desirability and the advantage of modifying Hies and

Kostic by employing the system of Ananda so that message are forward to the unicast address of the a particular host, in this way creating an efficient network traffic usage.

Ananda further teaches detecting said unicast request at said aliased network interface by said translation mechanism; processing of said unicast request by said translation mechanism to determine an address for said destination host using said second protocol; and forwarding said unicast request by said translation mechanism to said destination host using said second protocol to establish a connection from said source host to said destination host (col. 9, lines 43-66).

As per claim 14, Ananda teaches wherein said dual-stack host comprises: a multicast domain name system application level gateway (mDNS-ALG) (col. 8, lines 47-65).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YASIN M. BARQADLE whose telephone number is (571)272-3947. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yasin M Barqadle/
Primary Examiner, Art Unit 2153